

Appl. No. 10/644,441
Amdt. Dated February 22, 2005
Reply to Office action of November 22, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A propeller shaft assembly comprising:
a ~~thin-walled~~ tubular member[.];
a connecting member fixed to each end of the tubular member[.]; and
a tubular support member having a generally uniform outer diameter is fixed within the tubular member, the support member comprising a rigid foamed plastic extending a first length (L1) within the tubular member and engaging an interior surface of the tubular member to increase the bending frequency of the propeller shaft assembly.
2. (Currently Amended) An assembly according to claim 1 wherein said support member comprises an open-cell foamed plastic impregnated with a ~~high-modulus~~ resin or cement.
3. (Canceled)
4. (Original) An assembly according to claim 3 wherein said support member includes a plurality of openings formed along the first length (L1) for reducing the weight of the support member.
5. (Currently Amended) An assembly according to claim 2 wherein said open-cell foamed plastic is generally flexible before being impregnated with the resin or cement.
6. (Original) An assembly according to claim 1 wherein said tubular member comprises metal or reinforced plastic.
7. (Original) An assembly according to claim 1 wherein said tubular member has a second length (L2) and the ratio of L1/L2 is less than 1.0.

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8. (Canceled)
9. (Currently Amended) A power transmission shaft comprising:
a ~~thin-walled~~ metal tube having a joint element or stub
shaft fixed to each end thereof[[,]]; and
a tubular support member having a generally uniform outer diameter is co-axially located within said tube and engaging an interior surface of said tube, said support member comprising a rigid foamed plastic extending along a length of the tubular member.
10. (Original) A power transmission shaft according to claim 9 wherein the support member has a first length (L1) and said tube has a second length (L2) and the ratio L1/L2 is less than 1.0.
11. (Original) A power transmission shaft according to claim 9 wherein the support member includes a plurality of opening formed along the first length (L1) for reducing the weight of the support member.
12. (Currently Amended) An assembly according to claim 9 wherein said support member comprises an open-cell foamed plastic impregnated with a ~~high modulus~~ resin or cement.
13. (Currently Amended) An assembly according to claim 12 wherein said open-cell foamed plastic is generally flexible before being impregnated with the resin or cement.
14. (Currently Amended) A method of producing a rigid power transmission shaft comprising:
providing a ~~thin-walled~~ metal or reinforced plastic tube;
and
introducing a tubular support member having a generally uniform outer diameter co-axially within said tube to engage an interior surface of said tube, said support member comprising a rigid foamed plastic extending along a length of the tubular member.

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15. (Withdrawn) A method according to claim 14 wherein the step of introducing includes impregnating an open-cell plastic foam with a high modulus resin or cement, and introducing said impregnated plastic foam into an interior of said tube.
16. (Withdrawn) A method according to claim 14 wherein the step of introducing includes foaming a plastic or cement support member within an interior of said tube.
17. (Withdrawn) A method according to claim 16 wherein the step of introducing includes co-axially locating a mandrel within said tube and foaming a plastic or cement support member in a region between said mandrel and said tube.
18. (Withdrawn) A method according to claim 15 wherein the step of introducing said impregnated plastic foam into an interior of said tube occurs before said impregnated plastic foam has set up.
19. (Withdrawn) A method according to claim 15 wherein the step of introducing said impregnated plastic foam into an interior of said tube occurs after said impregnated plastic foam has set up.
20. (New) An assembly according to claim 1 wherein said tubular member has a thickness generally less than 8 mm.
21. (New) An assembly according to claim 1 wherein said tubular member has an outer diameter generally greater than 40 mm and generally less than 300 mm.
22. (New) An assembly according to claim 1 wherein said tubular member has a second length (L2) and the ratio of L1/L2 is greater than 0.25.
23. (New) A power transmission shaft according to claim 9 wherein the support member has a first length (L1) and said tube has a second length (L2) and the ratio L1/L2 is greater than 0.25.